REMARKS

By this amendment, Applicants have added claims 14-24 to further define their invention. In particular, claims 14-17, 20, 21, 23 and 24 are supported by, e.g., the paragraph bridging paragraphs 6 and 7 of the substitute specification. Claims 18-24 are supported by, e.g., Figure 1 and the description thereof in Applicants' specification.

The Examiner notes Applicants' traversal of the election requirement but refuses to withdraw the election requirement since Applicants made an election in the last response. However, as Applicants were advised in the Office Action mailed September 7, 2005, Applicants were required to make an election, whether or not the requirement was traversed. The fact that Applicants made an election does not negate their traversal of the improper election requirement. Accordingly, it is again requested that the election of species requirement be withdrawn. In any event, newly added claims 14-24 read on the elected species.

Claims 1-4, 7, 8, and 10-12 stand rejected under 35 U.S.C. 102(b) as allegedly anticipated by U.S. Patent No. 5,911,222 to Lawrence et al. (Lawrence et al. '222). Applicants traverse this rejection and request reconsideration thereof.

The present invention relates to an automatic urine disposal device for discharging urine collected in an urine receptacle into a urine tank by using a vacuum pump, and to an urine receptacle used for an automatic urine disposal device to absorb urine discharge from a wearer's urinating part. According to the present invention, the urine receptacle comprises a substantially rectangular, non-breathable outer sheet, a urine absorbent material housed in the outer sheet, an a hard-breathable top sheet disposed on the surface of the urine absorbent material. The phrase "hard-breathable" is defined in Applicants' specification in the paragraph

bridging pages 6 and 7 of the substitute specification. As defined therein, the "hard-breathability" of the top sheet means the breathability measured according to the General Textile Testing Method's breathability testing method A, prescribed in JIS L 1096, 6.27.1, from 0 to 100 cm^3/cm^2/second when the top sheet is moist and from 20 to 200 cm^3/cm^2/second when the top sheet is dry.

The Lawrence et al. '222 patent discloses a liquid removal system having an interface device and a vacuum source. The interface device has a porous membrane with an entrance zone on one side. Specifically, the interface device is provided with a top or body contact surface 17 and a bottom or external surface 18. The side of the interface device opposite the body surface side 17 is a plastic shell 28. The interface device further comprises an entrance zone which may be filled with a fibrous foam or other type filling material 24. The interface device is provided with a coverstock material 21 over body contact surface 17. The coverstock material is preferably hydrophobic or treated so that it is rendered hydrophobic. A preferred material for the coverstock is a non-woven polymeric fibrous material such as polypropylene which is hydrophobic yet capable of breathing. The coverstock is disclosed to be capable of repelling moisture by retaining the capacity to "breathe" so that there is a reduced risk of irritation to the skin. See, column 5, lines 31-44 of Lawrence '222.

Thus, while the cover stock material of Lawrence et al. '222 retains the capacity to "breathe," the top sheet used in the present invention is a "hard-breathable" top sheet. A hard-breathable top sheet is fairly airtight (as defined in the paragraph bridging paragraphs 6 and 7 of the substitute specification). The hard-breathable top sheet and the outer sheet together with the top sheet keep the urine absorbent material highly airtight, so that the urine can be easily drained by a

vacuum pump. In fact, a vacuum even at low power can achieve higher urine collection using the top sheet of the present invention than a vacuum pump at a high power without such a top sheet. See, Figure 6 in the description at page 11, line 10 to page 12, line 14 of the substitute specification. The hard-breathable top sheet and the unexpectedly advantageous results achieved thereby are neither disclosed nor suggested by Lawrence et al. '222. Accordingly, the presently claimed invention is patentable over Lawrence et al. '222.

For the foregoing reasons, reconsideration and withdrawal of the rejection of claims 1-4, 7, 8; and 10-12 under 35 U.S.C. 102(b) are requested.

Newly added claims 18-24 are also patentable over Lawrence et al. '222 for the reasons provided above and for the following additional reasons.

According to the present invention, the configuration includes that the urine absorbent material is accommodated in the outer sheet made of soft flexible materials, the top surface of the urine absorbent material is covered by the non-woven top sheet, the urine absorbent material is kept highly airtight as well as the outer sheet, the urine sensor is provided on the vicinity of one end of the urine drainage tube made of soft flexible materials, the urine is absorbed into the urine absorbent material through the holes on the top sheet upon the wearer's urination, and the urination is detected by the urine sensor and then the vacuum pump is activated. Due to this configuration, the urine receiver fits the wearer's body well, the wearer recognizes less wet feeling at the vicinity of urination, and thus he or she does not feel discomfort.

The inventors of the present invention focused attention to the following problems and solutions. That is, in order to prevent the wearer from feeling discomfort, it is difficult to reduce the wearer's wet feeling at the vicinity of urination

only by effectively removing the urine from the surface as disclosed in the cited reference. Therefore, we recognize that it is required to make the urine receptacle smaller and lighter in order to wear and keep the urine receptacle inside the wearer's underwear.

In contrast, the cited reference fails to disclose or suggest the following features set forth in the added claims 18-24: a top sheet that keeps the urine absorbent material highly airtight, use of soft flexible materials for the urine tube in order to provide the urine tube at the vicinity of wearer's urination without discomfort, urine drainage that is promptly absorbed into the urine absorbent material through the holes on the surface sheet upon urination with the urine drainage being detected promptly by the urine sensor arranged at the entrance of the urine tube, and the discharged urine being transported to the urine tank by driving the vacuum pump.

For the foregoing additional reasons, claims 18-24 are also patentable over Lawrence et al. '222.

Applicants note the Examiner has cited a number of documents as being pertinent to Applicants' disclosure. However, since these documents were not applied in rejecting claims formerly in the application, further discussion of these documents is deemed unnecessary.

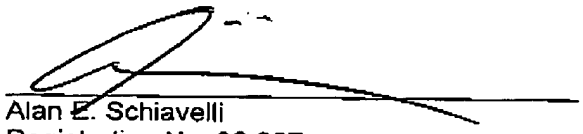
In view of the foregoing amendment and remarks, favorable reconsideration and allowance of all of the claims now in the application are requested

To the extent necessary, applicants petition for an extension of time under 37 CFR 1.136. Please charge any shortage in the fees due in connection with the filing of this paper, including extension of time fees, to the deposit account of Antonelli,

Terry, Stout & Kraus, LLP, Deposit Account No. 01-2135 (Case: 503.43626X00), and please credit any excess fees to such deposit account.

Respectfully submitted,

ANTONELLI, TERRY, STOUT & KRAUS, LLP



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